

## BPA

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **23**
- SRM **5.6**
- Style **Belgian Pale Ale**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **29 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.4 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **19.4 liter(s)**

### Steps

- Temp **64 C**, Time **20 min**
- Temp **67 C**, Time **40 min**
- Temp **72 C**, Time **10 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **70.5C**
- Add grains
- Keep mash **20 min** at **64C**
- Keep mash **40 min** at **67C**
- Keep mash **10 min** at **72C**
- Sparge using **18.4 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	3 kg (68.2%)	80 %	4
Grain	Pilznieński	1 kg (22.7%)	81 %	4
Grain	Pszeniczny	0.2 kg (4.5%)	85 %	4
Grain	Crystal 150 Castle Malting	0.2 kg (4.5%)	--- %	150

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	20 g	50 min	9.5 %
Boil	Saaz (Czech Republic)	30 g	5 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Fermentis Safbrew BE-256	Ale	Dry	11 g	---

### Extras

Type	Name	Amount	Use for	Time
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Fining	Whirlfloc T	1 g	Boil	5 min
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